

AMENDMENT

Kindly amend the above-identified patent application, without prejudice, as follows.

In the Claims:

Please AMEND claims 1, 2, 10, 11, 18 and 19 as set forth below:

1. (Amended) A method of targeted delivery of mammalian stem cells of myeloid origin into a nervous system of a mammal by administering a therapeutically effective amount of mammalian stem cells of myeloid origin into said nervous system of said mammal, whereby

said mammalian stem cells of myeloid origin migrate from an injection site to a preferred site in said nervous system of said mammal, and

said mammalian stem cells of myeloid origin engraft into said nervous system of said mammal at said preferred site.

2. (Amended) The method of Claim 1, wherein said mammalian stem cells of myeloid origin are isolated from at least one of the group of bone marrow, mobilized peripheral blood, umbilical cord blood, or fetal liver tissue from a mammal.

10. (Amended) A method of treating disorders, diseases, or trauma of a nervous system of a mammal by administering a therapeutically effective amount of mammalian stem cells of myeloid origin into said nervous system of said mammal, whereby

said mammalian stem cells of myeloid origin migrate from an injection site to a preferred site in said nervous system of said mammal,

said mammalian stem cells of myeloid origin engraft into said nervous system of said mammal at said preferred site,

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said engrafted mammalian stem cells of myeloid origin differentiate into neuronal and glial cells, and

said neuronal and glial cells replace damaged nervous system tissue.

11. **(Amended)** The method of **Claim 10**, wherein said mammalian stem cells of myeloid origin are isolated from at least one of the group of bone marrow, mobilized peripheral blood, umbilical cord blood, or fetal liver tissue from a mammal.

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18. **(Amended)** A method of treating disorders, diseases, or trauma of a nervous system of a mammal by administering a therapeutically effective amount of mammalian stem cells of myeloid origin into said nervous system of said mammal, wherein said mammalian stem cells are transiently or stably genetically engineered by at least one viral vector or by non-viral transfection, whereby

said mammalian stem cells of myeloid origin migrate from an injection site to a preferred site in said nervous system of said mammal,

said mammalian stem cells of myeloid origin engraft into said nervous system of said mammal at said preferred site,

said engrafted mammalian stem cells of myeloid origin differentiate into neuronal and glial cells, and

said neuronal and glial cells replace damaged nervous system tissue.

19. **(Amended)** A method of treating disorders, diseases, or trauma of a nervous system of a mammal by administering a therapeutically effective amount of mammalian stem cells of myeloid origin into said nervous system of said mammal, wherein said stem cells of myeloid origin deliver viral vectors, other transducing agents, or biological pumps of peptides directly into said nervous system of said mammal, whereby

said mammalian stem cells of myeloid origin migrate from an injection site to a preferred site in said nervous system of said mammal,

said mammalian stem cells of myeloid origin engraft into said nervous system of said mammal at said preferred site,

said engrafted mammalian stem cells of myeloid origin differentiate into neuronal and glial cells, and

said neuronal and glial cells replace damaged nervous system tissue.

said mammalian stem cells of myeloid origin migrate from an injection site to a preferred site in said nervous system of said mammal,

said mammalian stem cells of myeloid origin engraft into said nervous system of said mammal at said preferred site,

said engrafted mammalian stem cells of myeloid origin differentiate into neuronal and glial cells, and

said neuronal and glial cells replace damaged nervous system tissue.

REMARKS

Claims 1-19 are currently pending in the present application.

Claims 1, 2, 10, 11, 18 and 19 have been amended by this amendment.

Claim 1 was amended to specifically recite the method of targeted delivery of mammalian stem cells. Support for the amendment can be found in the specification beginning on page 23, line 21, ending on page 24, line 2.

Claims 2 and 11 were amended by changing the word "derived" to "isolated," which is well defined in the specification, beginning on page 11, line 31, ending on page 14, line 2.

Claim 10 was amended to specifically recite a method of treating disorders, diseases, or trauma of a nervous system of a mammal. Claim 10 was also amended to correct the misspelled word "system". Support for the amendment can be found in the specification, beginning on page 23, line 21, ending on page 24, line 2.